

Abstract

Embodiments include a semiconductor device comprising: a pad formed on an insulating layer and having an electric connection region with external components; and a protective insulating layer which has an aperture for exposing the electric connection region. The protective insulating layer may include a first insulating layer and a second insulating layer, and side surfaces of these insulating layers are exposed to the aperture. At least part of the side surfaces surrounding the electric connection region have a tapered configuration at an acute angle to a top surface of the pad. This semiconductor device not only enables reduction of the fabrication steps, but also provides a reliable passivation structure for a pad with sufficient thickness and stress relaxation characteristics.